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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,864	02/18/2004	Edwin Eduard Nicolaas Josephus Krijnen	081468-0308328	6215
909 7590 08/30/2007 PILLSBURY WINTHROP SHAW PITTMAN, LLP Eric S. Cherry - Docketing Supervisor P.O. BOX 10500 MCLEAN, VA 22102			EXAMINER TURNER, SAMUEL A	
			ART UNIT 2877	PAPER NUMBER
			MAIL DATE 08/30/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/779,864

Applicant(s)

KRIJNEN, EDWIN EDUARD  
NICOLAAS JOSEPHUS

Examiner

Samuel A. Turner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 20 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-17, and 21-24 is/are rejected.
- 7) ☒ Claim(s) 18 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

The replacement drawing received on 8 June 2007 is accepted by the examiner.

### *Response to Arguments*

Applicant's arguments filed 8 June 2007 have been fully considered but they are not persuasive.

Applicant's amendment has overcome the rejection of claims 18 and 19 under 35 U.S.C. § 112, first paragraph.

Applicant's amendment has overcome the rejection of claims 1-7, and 21-24 under 35 U.S.C. § 101.

Applicant's amendment has overcome the rejection of claims 1, 2, and 6 under 35 U.S.C. § 102(b) as being anticipated by Peggs et al(CIRP-1999).

Applicant's amendment has overcome the rejection of claim 7 under 35 U.S.C. § 102(b) as being anticipated by Ukaji(6,285,457).

Applicant's arguments with respect to claims 1-6, 8-15, 21, and 23 rejected under 35 U.S.C. § 103(a) as being unpatentable over Ukaji(6,285,457) in view of Peggs et al(CIRP-1999) have been considered and are not persuasive. See the section labeled "Rejections Under 35 U.S.C. § 103" of Applicant's remarks.

Applicant provides two arguments against the combination of Ukaji and Peggs et al.

First: that the processor of Ukaji would be rendered inoperable because it calculates the displacements  $\Delta d1$ ,  $\Delta d2$ , and  $\Delta z$  from the parallelism of laser beams La, Lb, and Ld.

Clearly any modification of Ukaji with Peggs et al must calculate  $\Delta z$  differently. Modifying Ukaji with the teaching of Peggs et al by repositioning the interferometer 16 such that the beam Ld is normal to the mirror 31b would change the calculations that determine  $\Delta z$ . With the beam Ld normal to the mirror 31b of Ukaji modified by Peggs et al, then  $\Delta Ld$  would be the vector sum of  $\Delta x$  and  $\Delta z$ . Both  $\Delta Ld$  and  $\Delta x$  are measured values from interferometers 16 and 15 and the angle with respect to the Z-axis is known. These calculations are basic trigonometry and are well within the scope of the skilled artisan.

Second: that the Examiner provides only a conclusory statement that the number of parts in the system of Ukaji would be reduced.

The mirror 35 can be eliminated by providing the interferometer beam Ld normal to the mirror surface. Therefor, the reduction in the number of mirrors would have provided the motivation for modifying Ukaji with the teaching of Peggs et al.

Applicant's arguments with respect to claims 16, 17, 22, and 24 rejected under 35 U.S.C. § 103(a) as being unpatentable over Ukaji(6,285,457), Peggs et al(CIRP-1999) and Van Den Brink(5,801,832), for claims 16 and 17, or Ukaji(6,285,457), Peggs et al(CIRP-1999) and Yamasaki et al(6,122,036), for claims

22 and 24, have been considered and are not persuasive. See the section labeled "Rejections Under 35 U.S.C. § 103" of Applicant's remarks.

Applicant argues that because claims 16, 17, 22, and 24 are dependent on claims 8, 21, or 23 they are allowable because Ukaji in view of Peggs et al fail to teach the subject matter of claims 8, 21, and 23. See the response to Applicant's arguments with respect to claims 1-6, 8-15, 21, and 23 above.

*Allowable Subject Matter*

Claims 7 and 20 are allowed in view of the prior art of record.

Claims 18 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

See the Examiner's statement of allowable subject matter in the non-final rejection dated 8 February 2007.

*Action Made Final*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel A. Turner whose phone number is 571-272-2432.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr., can be reached on 571-272-2800 ext. 77.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Samuel A. Turner', with a stylized flourish at the end.

Samuel A. Turner  
Primary Examiner  
Art Unit 2877